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ON

## THE HEALTH OF NIGHTMEN, SCAVENGERS, AND DUSTMEN.

BY

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On the Health of Nightmen, Scavengers, and Dustmen. By WILLIAM AUGUSTUS GUY, M.B., Cantab.; Professor of Forensic Medicine, King's College, London; Physician to King's College Hospital: Honorary Secretary to the Statistical Society, &c.

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I was induced to enter on the inquiry indicated by the title of this communication in consequence of an application made to me by the owner of a laystall, indicted as a nuisance, that I would examine the effect on the health of the neighbourhood of the laystall in question. The examination of the health of nightmen, scavengers, and dustmen, the results of which I now propose to lay before the Society, grew

out of this local inquiry.

As in all scientific investigations, much depends upon the absence of any decided bias in the mind of the observer; it may be well to premise that a careful examination of the evidence laid before the Health of Towns' Commission in reference to the health of nightmen and of men working in the sewers of London, had left me in a state of uncertainty as to the real effect of this class of occupations upon health—a state not unfavourable to the discovery of truth\*. In reference to the several subjects of the inquiry, it may also be desirable to state, that they were in no way prepared for the questions put to them, either by previous notice of my intended visit, or by any preliminary observations calculated to affect their answers to my queries. The mode of procedure was as nearly as possible the same in all cases, and such as I deemed most likely to elicit the real truth.

With a view of collecting the facts relating directly to the health of the men employed, in one way or other, in laystalls, whether as nightmen, scavengers, dungmen, dustmen, or hillmen, I visited and inspected eleven laystalls, being nearly one-half of the number existing in the metropolis. For the facts relating to the health of bricklayers' labourers, I am indebted to Mr. Baker, who gave me facilities for personally inspecting the men employed on the works of the British Musenm, and for those bearing on the health of brickmakers, to Mr.

Dodd, the well-known dust contractor.

My first inquiries were directed to the health of the men employed in the laystalls; and as it was necessary to compare them with some standard, I selected the bricklayers' labourers as most likely to answer that purpose. When, however, I came to examine the latter class of men, I found that they differed from the objects of my inquiry in a point which seemed by no means unimportant—the large majority are Irish, while an equal proportion of the men who work in laystalls are English. It was this circumstance which induced me to visit the brickfields, as I was given to understand that I should there meet with a class of men consisting, with very rare exceptions, of Englishmen, and, for that reason, furnishing a more just standard of comparison;

<sup>\*</sup> See "Ranking's Half-yearly Abstract of the Medical Sciences," vol. IV., p. 417, where, in reference to the men working in the sewers, I express the opinion that we are bound to suspend our judgment "till a more extended inquiry, and an accurate comparison with some healthy standard of out-door occupation shall have been instituted."

my object being to contrast two classes of men resembling each other in the common circumstance of working in the open air, and as much as possible in all other points, but differing in being or not being ex-

posed to offensive exhalations.

It is not necessary that I should enter into any description of the occupations of the bricklayers' labourer or of the brickmaker; but as the employments of which the laystall are the scene are less familiar, it may be desirable to enter into a brief description of them. In most of the laystalls or dustmen's yards, every species of refuse matter is collected and deposited:-nightsoil, the decomposing refuse of markets, the sweepings of narrow streets and courts, the sour-smelling grains from breweries, the surface soil of the leading thoroughfares, and the ashes from the houses. The proportion in which these several matters are collected, varies with the engagements of the contractors. In some laystalls, for instance, little or no nightsoil is deposited, while in others, this material is collected in large quantity. In all these establishments the bulk of the deposits consists of dust from the houses, which is sifted on the spot by women and boys seated on the dust-heaps, assisted by men who are engaged in filling the sieves, sorting the heterogeneous materials, or removing and carting them away. All the persons so occupied are, of course, exposed to the exhalations which rise from the several deposited matters; but more directly and immediately to those with which their own special occupation brings them into contact. It would not answer any good purpose to enter into a minute classification of the several persons submitted to inspection and inquiry, especially as many of them have followed at different times different branches of the trade; but as I have noted down the employment chiefly followed by each man, I shall be able to make such distinctions as may seem called for.

The points ascertained by inspection and inquiry, were the same in the case of each class of working men, and the questions put to them were shaped as nearly as possible in the same way. The results were noted down on the spot in a tabular form, comprising for each individual the initials, age, age at the time he began to work, the diseases, if any, to which he was subject, the particulars of absence from work, with the assigned cause and duration of the absence or absences, and the previous occurrence of fever. In reference to the latter point especially, if the answer to the question—Have you ever had an attack of fever? was in the affirmative, the duration of the illness, and such other particulars as could be obtained, were noted down, and the disease was not entered as fever until I had satisfied myself that in all probability it had been rightly named. To the results of these inquiries, I added in a separate column, the letter G or B indicating good or bad health, as shown by the appearance, still further distinguishing the first class by the figures 1, 2, 3, indicative of the degrees of good health, the figure 3 standing for robust health, and 1 and 2 for lower degrees of strength and vigour. As might be expected, very few in any of the employments were in bad health, but there was a marked difference in the proportion of the robust to those whose health seemed less vigorous. With a view of avoiding circumlocution, I shall designate the men employed in laystalls by the one word Scavengers, and shall at once present the results of my inquiry

under that title in a condensed tabular form.

		1	
	Scavengers.	Bricklayers' Labourers.	Brickmakers.
Number examined	96	73	28
Greatest age of any man at work	66	64	68
Number above 20 years of age	75	71	26
Average age of all above 20		38.77	38.77
,, ,, 30	44.66	41.75	43.42
State of health.—Robust	78	59	19
Ditto per cent		81.	68.
,, Good		12	4
Ditto per cent	12·5 6	16.5	14.
,, Delicate Ditto per cent	6.		11.
Pad		2	2
Ditto per cent		3.	7.
		00	
Number attacked by fever	8· 8·	26 35·5	6 21·5
Number of attacks of fever	9	28	6
Ditto per cent.		38.	21.5
Subject to Gout	3		
Calda	3	3 2	6 2
Winton cough		6	2
,, Cough	3	i	••••
,, Asthma	1	2	
,, Spitting of blood	da a s	1	****
,, Vomiting of blood	1	••••	••••
,, Indigestion		1	****
Dain in the side	1	ï	
,, Fits	1	i	2
Total subject to illness	18	18	10
Ditto per cent.	19.	25.	36.
Never kept from work one day by illness Ditto per cent.	51	26	5
Never kept from work one week by illness	53· 16	36 <b>·</b> 5	18.
Ditto per cent.	18.	7.	4 14·
			**
Severe Attacks of Illness. Inflammation of liver	,		
Rheumatic fever	$\frac{1}{4}$	2	
Brain fever, (delirium tremens.)	2	2	3
Inflammation of lungs	ĩ	3	$\frac{1}{4}$
Influenza	ī	2	1
Vomiting of blood	1		
Sman pox	••••	1	****
Ague	****		2
Bowel complaint	****	****	1
-	****	****	l
Total	10	8	13
Ditto per cent	10.5	11.	46.

An examination of this table, which has been earefully compiled from the notes taken on the spot, must convince the most sceptical, that the health of scavengers is fully equal to that of the labouring men with whom they are compared. The average and greatest ages of men actually at work, the state of health as determined by inspection, the proportionate numbers subject to illness, or having suffered from severe attacks of disease, and the numbers altogether exempt from sickness, or kept from work only by short attacks of indisposition—when taken together supply a strong argument in favour of the healthiness of the scavenger's occupation.

But the most remarkable result of the comparison is displayed in the relative liability of the three classes to fever. Sir Anthony Carlisle\* notices the slight liability to fever of the men employed in eleansing the sewers; and the numbers in the foregoing table would certainly tend to confirm his statement, by the analogy of a class following an allied occupation. It will be seen, that the number of men attacked by fever among the scavengers is 8 per cent., among bricklayers' labourers  $35\frac{1}{2}$  per cent., and among brickmakers  $21\frac{1}{2}$  per cent.; while the attacks of fever in the three classes are 9, 38, and  $21\frac{1}{2}$  per cent. respectively. In other words, the bricklayers' labourer is more than four times, and the brickmaker nearly three times as liable to fever as the scavenger.

On referring to the column of my notes in which the occupation chiefly followed by each individual is set down, I find, that of 34 men entered as nightmen, only 1 had had an attack of fever: after being out of work three weeks†. The remainder occurred in men following other branches

\* "Practical Observations on the Preservation of Health and the Prevention of Diseases," 1838, p. 19. Sir Anthony states that out of between forty and fifty men employed in the Sewers, only three had had fever. Patissier ("Traité des Maladies des Artisans"), however, describes the greater part of the men employed in the sewers of Paris as cachectic, as having a blanched and livid appearance, and as scareely attaining the age of forty or fifty years. He ascribes their unhealthy appearance to their poverty and low living. The men employed in the sewers of London, on the contrary, are, according to Sir Anthony Carlisle, who is fully borne out by the facts collected at his request by Mr. John Houseman, Clerk to the late Westminster Commission of Sewers, (see Mr. Hertslet's Evidence before the Health of Towns' Commission,) by no means an unhealthy race of men. See also, in confirmation of this opinion, the statement of Mr. I'Anson. These facts and opinions will be found more minutely detailed in "Ranking's Half-yearly Abstract of the

Medical Sciences, vol. IV., p. 420.

† It is remarkable that Ramazini, in his chapter on the diseases of men following this occupation, makes no mention of any complaint to which they are subject except inflammation of the eyes: and this is the more worthy of observation as he himself tells us that the first idea of his work was suggested by pity for this very class of labourers. Patissier, after noticing this complaint of the eyes, under the designation Mitte, enters into considerable detail on the asphyxia of nightmen, known in Paris as the Plomb; but he does not enter into any details respecting their general state of health, or point out any other maladies to which they are subject. The same author bears testimony to the general good state of health of the manufacturers of urate and pondrette, who are exposed to the same exhalations as nightmen. Thackrah ("The effects of Arts, Trades, and Professions, &c., on Health and Longevity," 2nd cdit., p. 62,) states that "The nightmen of London are generally healthy, notwithstanding their disgusting occupation. Of 18, examined by my assistant, only two had even slight disorder. Appetite, they declare, is increased by the effluvium. Their only complaint is defect of food from lowness of wages." Much to the same effect is the evidence of Mr. James Creevy, nightman, of Drury

of the business. One of these (now a master seavenger) had had two attacks of fever which he attributed to his business; a second (a hillman\*), stated that he was taken ill with fever after cleansing an alley in White Cross Street; a third (also a hillman), had suffered from fever, but could not trace it to any distinct cause; a fourth (a dustman), had an attack of fever before he entered his business; a fifth (a hillman), had an attack of fever twenty years ago, when working at a willow manufactory, and he stated that it ran through the workshop; a sixth (a dustman) had fever a year ago while working, for a time, at a coal wharf; and the seventh was attacked while working at his usual employment of a dustman.

It would appear, then, that out of eight persons attacked with fever four only were at the time actually working at their usual employment, while of the remainder, only two attributed the disease to the occupation itself. The number of men attacked by fever among the class designated generally as scavengers might, therefore, have been fairly reduced one-half, but as I was unwilling to exercise too rigorous an exclusion, I have contented myself with pointing out the true state of the facts.

The excess in the number of fever-eases occurring among the bricklayers' labourers, is a very remarkable fact. I had examined 16 of the men before it occurred to me to inquire whether they had been attacked in England or in Ireland; but in the case of the remainder I took eare to ascertain this point. The result of the inquiry was, that 12 out of the 57 had been attacked in Ireland, 1 in France, and 9 in England. These 9 eases of fever, out of a total of 57, (or nearly 16 per cent.,) must, therefore, have occurred while the men were following their particular occupation. Whether the occupation itself is in any way to blame, is a question that must be reserved for examination presently.

If we take, as our test, the number of eases of fever occurring among the three classes submitted to examination, it would seem to follow that the seavengers of London are a peculiarly healthy race of men. How far this conclusion is borne out by the application of

other tests, I now proceed to inquire.

The greatest age of any man at work among the 96 scavengers examined, was 66, the oldest bricklayers' labourer, was 64, and the oldest brickmaker 68. Men were reported to me by name who had passed their 70th year and were still at work in the laystalls, and one Richard Tyrrell, of the Parish of Shadwell, was stated to have reached the age of 97, after having worked all his lifetime at the trade. In corroboration of this statement, which was confirmed by a score of

Lane, who, out of nine men in his employ, had one of 60 and another of 66 years of age; and of Mr. Thorn, who knew one man at work at 67 and who describes them

as a healthy and robust set of men.

A fact mentioned to me, by Mr. Stevens, who did me the favour of accompanying me in my inspection of the scavengers' premises, is too curious to be omitted. He stated that he perfectly well recollects, thirty years ago, when he was a lad, seeing as many as twelve patients, directed by the faculty of that day to walk round the shoots for night-soil on his father's premises; and he appealed for confirmation of this statement to his brother, who said that he had seen scores of patients industriously inhaling this very curious dose of physic. · Employed in sifting the ashes.

master scavengers, it was mentioned that when, in the course of last year, a deputation of the leading contractors waited upon Lord Morpeth, a petition for pceuniary assistance to bury this man was shown to his lordship. Another man, who was familiarly known as Old Wood, was said to have completed a century. I have already stated incidentally, that out of nine nightmen employed by Mr. Creevy, one was 66 years of age, and that Mr. Thorn refers to one who was at work at 67. Measured, therefore, by the test of age, the occupation of the

seavenger would not appear to be very unhealthy.

The average age attained by all above 20 in the three classes of occupation does not materially differ; the scavengers. however, are about a year younger than the two other classes, This circumstance is easily explained by the fact, that many of the men working in the scavengers' yards begin at a very early age as sifters, while the bricklayers' labourer is not fit for any branch of his employment till a later period; and this remark applies, to a more limited extent, to the brickmaker. That this is the true explanation, is rendered highly probable, by the average age of all who are employed in the three trades above 30 years of age. The mean age of the bricklayers' labourer, reckoning from this point, is found to be 41.75, of the brickmaker 43.42, and of the scavenger 44.66. In confirmation of these results, it may be mentioned, that the average age of the 45 sewermen examined by Mr. Houseman, was 39 years and 2 months, and that of the men reported upon by Mr. l'Anson, 45 years. It may afford a standard of comparison, to give the average age of pressmen and compositors, as ascer-Of 45 pressmen it was 34 years, and of 197 tained by myself. compositors 28 years.

The per centage proportion of men among the scavengers found in the enjoyment of robust health, is the same as among the bricklayers' labourers, but greater than among the brickmakers, the numbers being respectively, 81, 81, and 68. But on the whole, I have no hesitation in stating, that the scavengers are the healthiest looking body of men.

The per centage proportion reporting themselves as subject to sickness of one kind or another in the three employments, are:—Scavengers 19, bricklayers' labourers 25, and brickmakers 36. So that in this respect the scavengers have a marked advantage.

The per centage proportions stating that they had suffered some severe attacks of illness, other than fever, were as follows:—Scavengers

 $10\frac{1}{2}$ , bricklayers' labourers 11, and brickmakers 46.

The per centage proportion attacked by fever, it may be well to repeat, were:—8,  $35\frac{1}{2}$ , and  $21\frac{1}{2}$ , for scavengers, brieklayers' labourers, and brickmakers respectively. Among nightmen it was 3 per cent. Of the 45 men working in the sewers, two, according to Mr. Houseman, had suffered attacks of fever, one of which was traced to the occupation. This would give about 4 per cent.

The per centage proportion of seavengers who had never been kept away from their work by illness for a single day, was 53, of bricklayers' labourers 36, and of brickmakers 18; being a result highly

favourable to the scavengers.

The per centage proportions never kept away from work a week by illness, were for the three classes as follows:—Scavengers, 18 per cent., bricklayers' labourers 7 per cent., brickmakers 14 per cent.; a result also favourable to the first-named class.

The following are individual instances of the enjoyment of uninterrupted health for a considerable term of years among the class of seavengers:—R. S., æt. 55, began to work at 15; W. L., æt. 56, began to work at 36, having previously served in the army; I. G., æt. 59, began to work at 8 years of age; J. W., æt. 62, began to work at 40, previously a labourer; J. C., æt. 66, began to work at 10 years of age.

The women and children employed in sifting the einders are no execption to the rule of good health enjoyed by the men. They are, with very few exceptions, a healthy looking, ruddy complexioned class. One or two of the boys whom I saw at work, would have been excellent

models for the artist.

[\*A fact in corroboration of what has been already advanced in proof of the wholesomeness of the occupation of the seavenger, is the excellent health of master-seavengers and their families living on their own premises, and often in common with their ancestors for one or two generations back, born there. I subjoin a few of the statements made to me on the spot, and borne out by my own observations in those

points which were open to examination.

Mr. C— has had 13 ehildren. They are all living and well, with the exception of one child who suffers from worms. His father and his maternal and paternal grandfather were born in London. He is a stout healthy-looking man, and has had little occasion for the services of the doctor, either for himself or family. Mrs. C— reports that Mr. R— died æt. 86, after living on the premises 12 years, Mr. R—, also æt. 86, after living there 18 years, and Mrs. T— æt. 89, after

residing with her 14 years.

Mr. B—— reports that his father, mother, and 10 children were born on his premises, and lived there with one servant. It was their boast that in 10 years they had only spent 1s. 6d. on physic. Mr. B.'s grandfather lived on the same spot. Mrs. B—— states that her father had the business before her husband. He had six children all living on the spot. He did not lose one. Her grandfather was born in London, and one of her brothers has a child born in London, making four generations of town-born. A finer couple in every respect I have never seen, whether in town or country, than these inhabitants of a dust-yard in a crowded part of the metropolis. It would be difficult to decide which was more remarkable for portly and rude health, the heads of the establishment, or the thriving breed of pigs making their warm beds in the finely sifted ashes, constantly undergoing a smothered combustion.

Mrs. N— has had 15 children, of whom she has lost one. She has lived in the yard 20 years, looks very healthy, and says that her

ehildren enjoy good health.

To conclude this account of the health of this very useful class of men, I will merely add, that the score or so of master scavengers who were brought together, on more than one occasion, by the trial already alluded to, as the origin of these inquiries, are the healthiest set of men I have ever seen. I do not think, that whether in town or country,

<sup>\*</sup> The paragraphs included in brackets were omitted from the Journal of the Statistical Society for want of room. The passage in the note at p. 11, also enclosed by brackets, has been added to the original paper.

such another body of men could be brought together except by selection; and it is not going too far to assert of them, that if the comparison were limited to the inhabitants of London, or our large towns, no score of selected tradesmen could be found to match the same number of seavengers brought easually together. Whether they are measured by their ruddy complexions, their portly figures, or their general appearance; they are certainly a very remarkable body-the more so, as the majority have been in the trade all their lives, and have lived on their premises in town, and several of them have risen from the ranks. To the broad rule of vigorous health, I have seen but one exception; and I have the best reason for believing that that exception is due to eauses very different from the occupation which he follows.

I would once more advert to the remarkable contrast offered by the three classes submitted to comparison in regard to their liability to fever. On the general question of the true cause of fever, there is, as is well known, a difference of opinion among medical men. There are those who believe that fever is chiefly or solely due to emanations from putrefying animal and vegetable matter, and they earry their belief so far as to condemn on this ground, all collections of such matters even on open spaces in the centre of our towns. On the other hand, there are many esteemed authorities who affirm that putrefying animal and vegetable matter is never the true cause of fever\*. It is probable that the truth will hereafter be found to lie between these two extremes. My own recent inquiries, and especially the facts detailed in this communication, certainly tend to confirm an opinion which I have more than once expressed, that filth is rather the nurse than the parent of fever, to which I would now add the expression of my opinion that, in extreme ease, fever may be bred of filth. These extreme eases are to be found, as I believe, not in the neighbourhood of dust-heaps, and accumulations of animal or vegetable matter in the

\* It will add to the interest and value of this communication if I append the opinions upon this point of one or two esteemed authorities. Dr. Watson (12 Lectures on the Principles and Practice of Physic,") is strongly of the opinion stated in the text, for he distinctly affirms "that neither animal nor vegetable decomposition is sufficient to generate fever of any kind (vol. I. p. 719, 1st edition);" and this is not a casually expressed opinion, but the spirit of all that he says on this difficult subject. Dr. Christison, again, ("Library of Medicine, vol. I., page 162,") says: "Since continued fever clearly originates often in propagation from the sick to the healthy, it becomes a second question of much interest, whether it originates in any other cause. Authors and practitioners seem in general to be very easily satisfied upon this head, and to have decided the matter in the affirmative; nay, some talk with the utmost familiarity of various special eauses, such as cold, fatigue, mental emotions, putrid effluvia, excesses of the table, and the like. But the question of the origin of continued fever and their causes is far from being easily settled to the satisfaction of a philosophical mind." Dunglison ("Elements of Hygiene," p. 91), speaking of "emanations from animal and vegetable substances in a state of decomposition," gives it as his opinion "that the admixture of such emanations with the air does not affect public salubrity to such an extent as might be imagined." Much to the same effect is the opinion of Thrackrah, (op. cit. pp. 63 and 193,) and of an author of deserved repute in his own time (Sir Gilbert Blane, Medical Logic, p. 162), who, after stating that he agrees with Dr. Bancroft in thinking "that febrile miasmata do not in any ease consist in the exhalations of simple putrefaction," admits that fever may be produced by the "sordes of the skin and tainted effluvia of the living human body," and especially mentions the exhalations from the holds of ships. The foregoing quotations are given as contributions to the statistics of opinion.

open air\*, but in houses inverted over ccsspools, or otherwise made the receivers of all the foul evacuations from ill constructed drains; or in houses crowded to excess with dirty and squalid occupants. Even in these extreme cases, however, but especially where they occur in the midst of crowded populations, there is great difficulty in forming a sound opinion, as in the midst of such populations, the seeds of all sorts of contagious diseases are likely to be very generally diffused, and ready at any moment to germinate into this destructive malady.

I am disposed to attribute the great liability of the bricklayer's labourer to fever, to the habit of over-crowding so common among the Irish, and I think it not unlikely, that the somewhat lower liability to fever to the brickmaker, may be also due to his mode of living. In comparing different occupations, so many things have to be considered both in the occupations themselves and in the habits of the men, that it is very difficult to arrive at a just conclusion. To attain to perfect satisfaction in this matter, it would be necessary to extend the inquiry to several other classes of men working out of

\* Patissier attributes the little inconvenience suffered by persons exposed to offensive effluvia to the circumstance of those effluvia being greatly diluted by the

atmosphere. In this opinion I fully concur.

† In two cases of fever which I have recently attended, the patients lived in a decent, well-paved court, in houses thus inverted over cesspools, and cheated into a false security by badly constructed drains. A few years since fever ran through a family of five persons in a large house in one of the open squares of London. It could not be traced from without, nor did it spread to any of the attendants. It proved fatal to two out of the fire. That house, too, was undrained, and constituted a receiver of offensive gases from cesspools in the basement. A case given in evidence before the Health Commission by Mr. Thorn, as the only one which he had been able to trace to a collection of filth, occurred in the person of a young man direct from the country, who was put to sleep in a kitchen under the windows of which horsedung had been heaped up. The interesting case reported by Dr. Christison, in the Seventh Vol. of the "Monthly Journal of Medical Science," was of this class. The drains of the farm-house in which typhus fever had broken out, were found "all closed up and obstructed with the accumulated filth proceeding from the necessaries and farm-yard," and "a part of the accumulation" of farm-yard stuff "had been heaped up very near the back wall of the house." [Two striking cases related to me by Mr. Fuller of Piccadilly, also belong to the same class. 1. A family occupied the ground-floor of a house for business, and lived up stairs. The house had been free from illness till a part of the second floor was fitted up and used as a nursery. The nursemaid, who slept in the room, was taken ill with typhus fever, was sent to the hospital, and died. Soon after, her successor and one of the children were attacked. The medical man in attendance, suspecting the existence of some local cause, was led to make inquiries, when he found that to save the labour of the servants, a sink had been in the corner of the nursery, which sink communicated directly with the sewer, and was untrapped. The sink was accordingly trapped, the nursemaid and child recovered, and the family continued healthy afterwards. 2. In a four-roomed house in a court in Pimlico, eight cases of fever have lately happened. One room contained a family of five, all of whom had been swept off by the diseasc. A drain runs directly under the house, by which the air is rendered extremely offensive.] The large number of fever cases occurring in Church Lanc, St. Giles's-a place completely isolated from the influence of laystalls or crowded graveyards, and from all external sources of impurity, except that due to the neglected state and bad habits of its inhabitants, is a striking example of the effect of over-crowding and personal uncleanliness. The neighbourhood of Hatfield Street is fortunate in possessing privies external to the houses for cesspools communicating with drains, and in a more moderate degree of over-crowding, and the inhabitants were found, in a corresponding degree, free from fever.



doors; as well as to strengthen the probabilities established in this paper by a reference to the employments of the victims of fever. The registration of occupations, however, is at present so imperfect that there is little hope of being able to collect a sufficient number of facts. In the meantime, the present contribution is offered as a collection of probabilities bearing on the health of a very useful body of men, and as probabilities, far more valuable than mere hypotheses unsupported by fact, or generalizations pushed to an extreme, attended, as they are, with the obvious inconvenience of diverting the attention of the advocates of sanitary improvement from the condition of our houses to that of laystalls, markets, and graveyards, which, though not free from objection, are comparatively harmless, and require rather strict supervision,

than summary suppression.

I eannot conclude this communication without adverting for a moment to the ease which gave rise to this inquiry. It was an indietment for a nuisance, in which two questions had to be decided by the jury:--1. Was the dust-yard a source of inconvenience and discomfort to the inhabitants of the neighbourhood? and 2. Was it injurious to health? The verdiet against the defendant may have turned entirely on the answers to the first of these questions. As to the second, the absence of deaths from fever in the streets and courts immediately surrounding the alleged nuisance, as proved by a reference to the books of the Registrar-General, the very trivial complaints of illness, and the very small number of eases of siekness found to exist on two several examinations of the neighbourhood, served to convince me that, if the disagreeable odours complained of by the neighbours, had any effect upon their health, it was in a degree which no test of sickness or mortality that I could apply, would have served to render evident. If this conclusion be well founded, it may not be deemed unimportant, when it is considered, that the thorough cleansing of so large a city as the metropolis, presupposes both a large staff of men, and convenient places of deposit at points not too remote from the districts requiring to be eleansed. A proper supervision of the laystalls and dust-yards of the metropolis would easily prevent them from becoming nuisances to the immediate neighbourhoods, and even advantageous to the health by preserving open spaces, which would otherwise be erowded with buildings. The complete street and house drainage of the metropolis would put a stop to the deposit of the more offensive matters; and the dust from the houses, and the sweepings of the streets might be deposited with perfect safety wherever it is found most desirable. The banks of the river, and of the several eanals, are the spots pointed out by common sense as the best and most convenient for the purpose.